

## **REMARKS**

Claims 1 to 51 are pending in this examination. Applicant has cancelled claims 2, 4 to 6, 9 to 11, 40 to 45, 47, and 49 to 51. Applicant has herein amended claims 1, 8, 12 to 30, 32 to 34, 36 to 39, 46, and 48 for purposes of clarity and form. Additionally, applicant has added new claim 52.

The Action has rejected claims 9, 20 to 30, 32, 34 to 39, 43 to 44, and 46 to 51 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As set forth above, claims 9, 43, 44, 47, and 49 to 51 have been cancelled, thereby obviating the rejection of those claims. Furthermore, claim 1 and the remainder of the claims rejected under 35 U.S.C. §112, second paragraph, have been amended to overcome the antecedent basis rejections.

With regard to the §112 rejection of claims 35 to 38, applicant has amended claims 36 to 38 to properly depend from claim 1.

Pursuant to the foregoing, applicants submit that claims 20 to 30, 32, 34 to 39, 46, and 48 clearly point out and distinctly claim the subject matter that applicant regards as the invention. Thus, reconsideration and withdrawal of the §112 rejection are respectfully requested. The Action sets forth that claims 20 to 30 would be allowable if rewritten to overcome the rejections under 35 U.S.C. §112, second paragraph.

The Action has objected to claim 10 under 37 C.F.R. §1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 10 has been cancelled, thereby obviating this rejection.

## **Patentability Argument.**

Applicant provides the following arguments establishing that the rejections under 35 U.S.C. §§102(b) and 103(a) should be withdrawn. The Examiner has rejected claims 40, 43 to 45, and 49 to 51 under 35 U.S.C. §102(b) as being anticipated by applicant's admitted art. The Examiner has rejected claims 1, 6 to 7, 10, and 31 to 51 under 35 U.S.C. §102(b) as being anticipated by Mentzel et al. (U.S. Patent No. 5,423,336). The Examiner has also rejected claims 1 to 19, 31 to 39, 41 to 42, and 46 to 48 under 35 U.S.C. §103(a) as being unpatentable over applicant's admitted art in view of Mentzel et al. Applicant submits that the claimed present invention is not anticipated by either applicant's admitted art or Mentzel et al. Furthermore, applicant submits that the claimed present invention is not unpatentable over applicant's admitted art in view of Mentzel et al.

Claims 40, 43 to 45, and 49 to 51 have been cancelled, thereby obviating their rejection under §102(b).

The present invention relates to an activated charcoal based smoke filter device for effectively reducing the level of p-benzosemiquinone (p-BSQ). P-BSQ is a highly reactive harmful oxidant that causes oxidative damage of DNA and leads to mutation and cancer. The device of the present invention also reduces other components of tobacco smoke such as nitric oxide, nicotine, etc. This is done by impregnating the second section with desired size and amount of charcoal particles. Relevant examples and tests have been conducted and are described in the specification to make the invention more clear.

Mentzel et al. make no reference to p-BSQ. Additionally, the effect of the ventilated filter cigarette on reduction in levels of p-BSQ, nicotine, and tar delivery is absent in this reference. The cited art refers to ventilation openings allowing air to enter the middle chamber. It does not explain the criteria for selection of the size and amount of activated carbon used in the middle section. Therefore, the effect of the "ventilated filter cigarette" on levels of nicotine, tar, p-BSQ and other toxic compounds cannot be construed. Furthermore, the Mentzel et al. patent does not provide any experiment or

test data to support this. The present invention describes in detail the amount of various sized activated charcoal to be used for inhibiting the deleterious effect of p-BSQ. With regard to the Examiner's reliance upon "applicant's admitted art" to support the aforementioned claim rejections, applicant submits that the prior art described in the specification lacks any reference as to the amount and size of charcoal required in relation to the length of cigarette. The cited art does not teach or suggest the filter device of the present invention and does not teach or suggest the amount and size of charcoal impregnation as disclosed in the present application.

Finally, applicant submits that independent claim 1 now includes the allowable subject matter of claims 20 to 30. Specifically, claim 1 now includes the activated charcoal mixture British standard mesh grain sizes of allowable dependent claims 20 to 30. Consequently, applicant submits that claim 1 is now also allowable. Moreover, applicant submits that dependent claims 3, 7 to 8, 12 to 39, 46, 48, and 52 are also patentably distinguishable for at least the same reasons as claim 1. As such, all rejections should be withdrawn since claims 1, 3, 7 to 8, 12 to 39, 46, 48, and 52 are clearly in condition for immediate allowance.

In view of the above remarks responsive to the subject Office Action, the applicant believes that the rejections under 35 U.S.C. §§102(b) and 103(a) should be withdrawn. The claims as currently presented distinguish from the art and represent patentable subject matter. Reconsideration and allowance, being in order, are earnestly solicited. Should there be further issues, the undersigned would welcome a telephone call to facilitate their resolution.

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Respectfully submitted,

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Paul D. Greeley

Paul D. Greeley  
Attorney for Applicant  
Registration No. 31,019  
Ohlandt, Greeley, Ruggiero  
& Perle, LLP  
One Landmark Square, 10<sup>th</sup> Floor  
Stamford, CT 06901-2682  
Telephone (203) 327-4500  
Fax (203) 327-6401